Uka Tarsadia University (Diwaliba Polytechnic)
Diploma in Environmental Engineering
Objective Type Questions (Occupational Health and Safety)

Unit 1

1) What other group of workers might be as susceptible to "brown lung" as textile workers?
   a) carpenters/cabinet makers
   b) farmers
   c) hairdressers
   d) police officers

2) Which of the following is a workplace injury that results in an employee missing time from work?
   a) occupational injury
   b) occupational illness
   c) lost-time injury
   d) workers compensation injury

3) Which mechanism has been found to be the most influential in terms of health and safety in the workplace?
   a) inspection by the Ministry of Labour
   b) the internal responsibility system
   c) fines and penalties
   d) industry self-regulation

4) Continuous work with such machines affects _____ and arms.
   a) Hands
   b) Nose
   c) Ear
   d) Leg

5) _____ is defined as the study of how people work in their environment.
   a) Hazard
   b) Ergonomics
   c) Risk
   d) Impact

6) Ergonomics used for
   a) process of designing or arranging workplaces, products and systems

b) mitigate the risks from these hazards
c) responsibility
d) none of above

7) _____ is any source of potential damage, harm or adverse health effects on something or someone
a) Risk
b) Responsibility
c) Work
d) Hazard

8) Personal safety is an individual's ability to go about their everyday life free from the threat or fear of _____harm from others.
a) Chemical
b) Psychological
c) Economic
d) None of above

9) _____ is important because when you're doing a job and your body is stressed by an awkward posture or repeated movement your musculoskeletal system is affected.
a) Ergonomics
b) Hazard
c) Work
d) Responsibility

10) Chemicals to enter the body is through direct contact with the _____or eyes.
a) Nose
b) Ear
c) Skin
d) Leg

11) _____ into the bloodstream may then allow the chemical to cause toxic effects on other parts of the body.
a) Absorption
b) Absorber
c) Sensitive
d) Effective

12) Respiratory tract is the most common route of entry for _____ , vapours, particles, and aerosols
a) Droplet
b) Gases
c) Area
d) None of above

13) Over _____ may include headaches, increased mucus production and eye, nose and throat irritation.

a) Exposure
b) Knowledge
c) Skill
d) Effort

14) Volatile_____materials should be used in a well-ventilated area, preferably a fume hood, to reduce the potential of exposure.

a) Hazardous
b) Non-hazardous
c) Vapour
d) Infective

15) _____ tract is another possible route of entry for toxic substances.

a) BlueBay disease
b) Gastrointestinal
c) Cholera
d) Hypothesis

16) OSHA was created to _____

a) Data analysis
b) To reduce hazards
c) Ecological development
d) EIA analysis

17) _____is the amount of a material, given all at once, which causes the death of 50% of a group of test animals.

a) LD_{50}
b) LC_{50}
c) Hazard
d) Absorption

18) Threshold Limit Values and Biological Exposure Indices are developed as guidelines to assist in the control of _____ hazards.

a) Health
b) Worker
c) Operator
d) Consumer

19) _____ and Biological Exposure Indices are developed as guidelines to assist in the control of health hazards.

a) Threshold Limit Values
b) Lethal dose
c) Lethal concentration
d) None of above

20) What is STEL?
   a) long term exposure limit
   b) short term exposure limit
   c) state term experience loss
   d) none of above

21) _____is a way of storing data to facilitate quick parsing of that data.
   a) TLV (Threshold Limit Value)
   b) STEL (short term exposure limit)
   c) Lethal dose
   d) Exposure

22) Excessive noise and heat are examples of _____hazards.
   a) Physical
   b) Occupational
   c) Chemical
   d) Biological

23) _____ is so fine that it will almost unnoticeably penetrate into the mouth and accumulate in the throat.
   a) Dust
   b) Bag
   c) Air
   d) Gas

24) Epidemiological investigations were performed in England in the _____.
   a) 1878
   b) 1967
   c) 1950
   d) 1678

25) _____ lung disorders have been defined as diseases of lung arising out of or in course of employment.
   a) Physical
   b) Occupational
   c) Biological
   d) Chemical

26) Ramazzini the father of occupational medicine who first described breathless among handlers of grains in _____ .
   a) 1713
   b) 1877
   c) 1977
   d) 1655

27) Pneumoconiosis was group of lung disease caused by _____ of dust that are breathed in and deposited deep in lungs causing damage.
   a) Inhalation
   b) Skin contact
   c) Irritation
   d) None of above

28) Asbestos is diffuse interstitial fibrosing disease of lung that is directly related to and duration of exposure.
   a) Light
   b) Intensity
   c) Uv rays
   d) Oxygen

29) Sign of asbestosis is _____of repetitive end respiratory crackles.
   a) Presence
   b) Absence
   c) Beneficial
   d) Adverse

30) _____ is the most abundant compound in earth's crust.
   a) Carbon
   b) Silica
   c) Nitrogen
   d) Oxygen

31) Occupational lung diseases are work-related, lung conditions that have been caused or made worse by the materials _____ is exposed to within the workplace.
   a) Person
   b) Material
   c) Information
   d) Data

32) _____ is a respiratory disease that can begin or worsen due to exposure at work and is characterized by episodic narrowing of the respiratory tract.
   a) Cholera
   b) Asthma
   c) Fever
   d) None of above

33) _____ used at the place of work may be dispersed into the air to form dust, mist, fumes, gas or vapour and can then be inhaled. a) Chemicals
   b) Skill
   c) Data
   d) Information

34) _____ may also be absorbed through the skin if it is wetted by for instance sweat.
   a) Water
   b) Air

c) Dust
d) Chemical

35) Harmful effects of chemical substances depend on the _____and the exposure to that chemical.
a) Toxicity
b) Vapour Dust
c) Data

36) smaller the_____is the deeper it will penetrate into the lungs with the inhaled air, thereby passing the defensive systems of the lungs.
a) Particle
b) Dust
c) Air
d) Inhalation

37) Fumes are formed when a metal is heated above its _____ point and its vapours condense into very fine, particles.
a) Cooling
b) Melting
c) Boiling
d) None of above

38) _____ is the ability of a substance to produce an unwanted effect when the chemical has reached a sufficient concentration at a certain site in the body.
a) Toxicity
b) Vapour
c) Dust
d) Fume

39) _____ container of an acid is much more hazardous than a closed container of the same material.
a) Dry
b) Open
c) Close
d) Wet

40) Ingestion of _____materials may occur as a result of eating in a contaminated work area.
a) Toxic
b) Flammable

c) Non toxic
d) None of above

41) _____ that contact the eye and the skin may be either absorbed into the body or cause local effects.
a) Inhalation
b) Absorption
c) Toxic
d) Dry

42) Spilling acid on your hand will cause_____harm.
a) Immediate
b) Never
c) Close
d) None of above

43) Exposure can be classified as _____or acute.
a) Exposure
b) Chronic
c) Effective
d) Non hazardous

44) Maximum airborne concentration of a biological or chemical agent to which a _____ may be exposed at any time.
a) Worker
b) Stakeholder
c) Farmer
d) None of above

45) _____ can be absorbed through the skin into the bloodstream.
a) Exposure
b) Chemical
c) Reagent
d) Physical

46) _____ effects appear immediately after exposure to high levels of a toxic substance and may be treatable.
a) Acute
b) Hazardous
c) Non hazardous
d) Flammable

47) Cancer is a chronic effect as lung scarring caused by _____ dust.
a) Alumina
b) Silica

c) Carbon
d) Charcoal

48) work tasks should be designed to limit exposure to _____risk factors.
a) Ergonomics
b) Skin disease
c) Allergy
d) Fume

49) Ergonomics can roughly be defined as the study of people in their working _____ .
a) Economic
b) Environment
c) Physical
d) Chemical

50) _____ wants to provide information and education to allow any employee to avoid injury.
a) Governor
b) Environmental health and safety
c) GPCB
d) None of above

Unit 2

1) _____is the state in which the risk of harm by accident to persons.
a) Safety
b) Work
c) Attitude
d) Place

2) Safety is generally interpreted as implying a real and significant impact on risk of death, or damage to property. a) Injury
b) Risk
c) Skill
d) None of above

3) Safety is a concept that includes all measures and practices taken to _____the life, health, and bodily integrity of individuals.
a) Preserve
b) Accurate
c) Injury
d) Hazard

4) philosophy study of the fundamental nature of _____and attitude that acts as guiding principle for behaviour.
a) Behaviour

b) Smell
c) Knowledge
d) None of above

5) Safety is _____ responsibility, not just the safety managers.
   a) Everyone
   b) Student
   c) Worker
   d) All of above

6) safety is defined as being able to show and employ one's self without fear of negative consequences of self-image, status or career.
   a) Psychological
   b) Social
   c) Chemical
   d) None of above

7) _____ are actions, emissions, events, conditions, or a combination that lead to an accident or incident.
   a) Risk
   b) Prevention
   c) Causes
   d) Skill

8) A _____ is fatally or seriously injured.
   a) Car
   b) Person
   c) Truck
   d) None of above

9) _____ training and education programmes should be held from time to time to train and educate employees, supervisor and workers. a) Safety
   b) Skill
   c) Information
   d) None of above

10) safety committee should be constituted is every _____and factory.
   a) House
   b) Plant
   c) Work
   d) None of above

11) Organizations should also_____and evaluate the workers at regular intervals.
   a) Monitor
   b) Repair
   c) Share
   d) Skill

12) Unsafe acts may be the result of lack of _____ or skill on the part of the employee, certain bodily defects and wrong attitudes.
   a) Knowledge
   b) Innovative
   c) Reuse
   d) Recycle

13) when _____ is insufficient, physical or mental conditions of employee is not good and sometime due to wrong attitudes of the employee.
   a) Work
   b) Skill
   c) Safety
   d) None of above

14) _____ is a sudden and unexpected occurrence in the industry which interrupts the orderly progress of the work.
   a) Accident
   b) Skill
   c) Information
   d) Proponent

15) What is leading causes of work injuries by type of accident?
   a) Nervous
   b) bodily reaction
   c) Rehabit
   d) None of above

16) What is the human factors that cause accidents?
   a) Inattention or distraction
   b) Monitor
   c) Work
   d) Skill

17) What is types of accident?
   a) Industrial Diseases and Illness
   b) Hazard
   c) Control
   d) Prevention

18) What is PPE in safety?
   a) PPE is equipment that will protect the user against health or safety risks at work. b) PPE work as reactive
   c) It is worked as health hazard
   d) None of above

19) _____ accidents such as car crashes and motorcycle wrecks are among the most common type of personal injury accidents.
   a) Information
   b) Motor vehicles
   c) Data
   d) All of above

20) What is accident in safety?
   a) It is non hazardous
   b) Accident, unexpected event, typically sudden in nature and associated with injury, loss, or harm
   c) Inflammable
   d) None of above

21) What is the factor responsible for accident?
   a) Increasing noise, heat
   b) Voice
   c) Information
   d) None of above

22) Distracted _____ is the most common cause of road accidents.
   a) Skill
   b) Driving
   c) Data
   d) None of above

23) _____ is main cause of accidents.
   a) Data error
   b) Physical error
   c) Human error
   d) Chemical error

24) What is type of accident?
   a) Industrial Diseases and Illnesses
   b) Climate change
   c) Gas release
   d) None of above

25) _____ accidents such as car crashes and motorcycle wrecks are most common accident.
   a) Riding
   b) Motor vehicle
   c) Blast
   d) All of above

26) Accidents can cause physical, financial and mental effects for everyone involved.
   a) Illegal

b) Traffic
c) Legal
d) None of above

27) _____ is an event that happens without being planned.
a) Proponent
b) Hazard
c) Accident
d) Effect

28) _____ can refer to any event big or small, good or bad, intentional or unintentional. a) Incident
b) Conditional
c) Unconditional
d) None of above

29) _____ cause factors include hazardous weather, volcanic ash, sand, dust, and birds.
a) Physical
b) Chemical
c) Biological
d) Environmental

30) _____ of risk provides a calculated frequency of injuries and a measurement of the seriousness of the injury.
a) Measurement
b) Map
c) Data
d) Information

31) Human factors are a major component of the causes of _____in the workplace.
a) Accidents
b) Risk
c) Work
d) Knowledge

32) _____ are generally agreed to be multicausal.
a) Harm
b) Accidents
c) Work
d) None of above

33) Accidents in chemical plants occur is from improper maintenance of _____.
a) equipment
b) work
c) stage

d) knowledge

34) Safety management system should be fully _____accessible, comprehensible to those that need to use it.

a) Working
b) Hazardous
c) Documented
d) Improving

35)Why do we need safety?

a) To reduce and minimize accident rate
b) To improve skill
c) To gathering data
d) None of above

36) What is basic principal of safety?

a) Work
b) Education
c) Skill
d) None of above

37) All persons are required to use proper _____ while using grounds tools or machinery.

a) Personal protective equipment
b) Personal hazard control
c) Safe working
d) None of above

38) Safety management is_____identification system.

a) Control
b) Hazard
c) Skill
d) None of above

39) Safety director is responsible for _____programme.
a) Working
b) Hazardous
c) Safety
d) None of above

40) Factories Act _____to take care of the health and safety of its employees, covering the various manufacturing activities employed in the company.
a) 1948
b) 1899
c) 1677
d) 1566

41) _____ is a continuous improvement process that reduces hazards and prevents incidents.
a) Worker
b) Health issue
c) Safety management system
d) None of above

42) What are the principles of safety management?
a) Identify and evaluate the severity and foreseeability of product hazards b) Evaluate risk
c) Hazard control
d) None of above

43) Project safety management is a rapidly growing alternative to the challenges of performing your project safety.
a) Work
b) Self
c) Other
d) Group

44) Injury or death is a _____ when a construction worker climbs a ladder. a) Work
b) Control
c) Risk
d) None of above

45) Primary objective of workplace safety is preventing workplace _____ , illnesses and fatalities.
a) Injuries

b) Hazard
c) Chemical spill
d) None of above

46) _____ management, States can manage their safety activities in a more disciplined, integrative and focused manner.
a) Non hazardous
b) Working
c) Safety
d) All of above

47) Responsibilities of _____with respect to safety management are clarified to ensure common understanding and expectations.

a) Personal
b) Other
c) Group
d) None of above

48) _____ data and information are analysed to allow consideration of those risks related to variable human performance.
a) Hazard
b) Accident
c) Safety
d) None of above

49) _____ the safety information to find out why the drift is happening helps to mitigate the safety risks.
a) Analysing
b) Negotiate
c) Working
d) All of above

50) _____ is a key component of safety management and includes hazard identification.
a) Safety audit
b) Safety risk management
c) Safety policy
d) None of above

Unit 3

1) What are examples of mechanical hazards?
a) Flywheels
b) Vehicle

c) Moving
d) None of above

2) _____hazards are created as a result of either powered or manual use of tools, equipment or machinery and plant.
   a) Physical
   b) Chemical
   c) Mechanical
   d) None of above
3) How many types of hazard?
   a) 6
   b) 5
   c) 7
   d) 4
4) Act 1948 is a comprehensive piece of legislation covering all aspects relating to factories including approval, licensing and registration of factories.
   a) Umbrella
   b) Factory
   c) Water
   d) None of above
5) Number of _____employed therein is less than ten if working with the aid of power and less than twenty if working without the aid of power.
   a) Vehicles
   b) Pollution
   c) Persons
   d) None of above
6) occupier shall make an application to _____Government to get permission to declare different departments of a factory be treated as separate factories.
   a) State
   b) MOEF
   c) NABL
   d) None of above
7) _____ procedure provides guidelines for safely working around electrical hazards.
   a) Hazard
   b) Safety
   c) Working
   d) None of above
8) Specially designed PPE for electrical work includes _____ insulating gloves, matting, blankets, and covers.
   a) Plastic
   b) Rubber

c) Steel
d) Wood

9) _____ used all electrical equipment before use.
a) Clean
b) Inspect
c) Label
d) Organize

10) Gloves used for electrical protection must be electrically tested ever _____ .
a) 3 months
b) 6 months
c) 12 months
d) Never

11) A Safety Electrical One Line Diagram should be used to _____ all sources of electrical energy. a) Identify
b) Castigate
c) Evaluate
d) Modify

12) The secondary of a current transformer must never be _____ while energized.
a) Grounded
b) Opened
c) Examined
d) Shortened

13) Shock is defined as an abnormal condition of the body where:
a) A broken bone has penetrated the skin
b) The lungs are unable to process oxygen properly
c) The muscles in the body have "frozen" and will not move
d) There is insufficient blood delivered to the body's cells

14) Arc blast is caused by
a) Poor contact within electrical wire splices
b) Radio frequency emissions from high-power transmitter
c) Discharge of high electrical current through open air
d) Failure to lock-out and tag-out electrical breakers

15) Current measurements are more dangerous to make with a multimeter than voltage measurements because:
a) You must use both hands to take the measurement
b) Most multimeters are unfused
c) The resulting magnetic fields may be very strong
d) The circuit must be broken (opened)

16) Generally grounding is provided for

a) only for the safety of the equipment
b) only for the safety of the operating personnel
c) both (A) and (B)
d) none of the above

17) Ground resistance should be designed such as
a) grounding resistance should be as low as possible
b) grounding resistance should be as high as possible
c) grounding resistance should be always zero
d) none of the above

18) A person qualified to perform electrical work must possess:
a) Skills/techniques to distinguish live parts from other parts of electrical equipment.
b) Skills and techniques to determine the nominal voltage of exposed live parts.
c) Knowledge on the use of PPE, insulating and shielding materials, and insulated tools.
d) All of above.

19) Electrical injuries are commonly caused by:
a) Unsafe equipment or installations
b) An unsafe environment
c) Unsafe work practices.
d) All of the above

20) Current flow from hand to hand is called:
a) Step potential
b) Touch potential
c) Amperage
d) None of the above

21) Probability of the event that might occur X Severity of the event if it occurs
a) Accident
b) Hazard
c) Risk
d) None of the above

22) For household wiring and small units, the following should be_____ used for safety measure
a) MCB
b) ACB
c) OCB
d) MCCB

23) The following is (are) used as safety device in machines
a) Fail safe
b) Safety interlocks
c) Limit switches
d) All of the above

24) _____ use caution when working near electricity.
   a) Always
   b) Never
   c) Rarely
   d) Sometimes

25) _____ is the flow of electrons around a circuit.
   a) Current
   b) Electricity
   c) Power
   d) Voltage

26) _____ workers have little or no training working on or near electricity.
   a) Pipeline
   b) Qualified
   c) Rescue
   d) Unqualified

27) Electrical hazards include shock, electrical arcs and blasts, and _____ or faulty equipment. a) Broken
   b) Double-insulated
   c) Polished
   d) Secure

28) _____ is a measurement of how much energy you are using each second.
   a) Distance
   b) Power
   c) Volume
   d) Weight

29) Avoid working in _____conditions.
   a) Cold
   b) Dry
   c) Sunny
   d) Wet

30) All electrical equipment before use.
   a) Clean
   b) Inspect
   c) Label
   d) Organize

31) _____ gives a stray current somewhere to go and keeps workers from becoming part of the circuit.
   a) De-energizing
   b) Energizing
   c) Grounding
   d) Guarding

32) _____ tools are encased in plastic and prevent the user from getting electrocuted if the tool develops a short circuit.
   a) Corded
   b) Double-insulated
   c) Green colored
   d) Grounded

33) Specially designed PPE for electrical work includes _____insulating gloves, matting, blankets, and covers.
   a) Plastic
   b) Rubber
   c) Steel
   d) Wood

34) _____ is a source of energy to power devices.
   a) Electricity
   b) Hazard
   c) Work
   d) Safety

35) Power sources are generally supplied by_____ found at hydroelectric, coal fired, or nuclear power plants.
   a) Energy
   b) Wind
   c) Generator
   d) None of above

36) _____ energy is distributed by above or underground power lines for end use in home, commercial, and industrial applications.
   a) AC
   b) DC
   c) Other
   d) None of above

37) Batteries in cell phones, lap tops, flashlights, Uninterruptable Power Supplies (UPS) or vehicles are sources of _____current.
   a) AC
   b) DC
   c) Other
   d) None of above

38) exposure to machinery and equipment hazards cannot be eliminated or substituted for machinery and equipment of improved _____.
   a) design
   b) work
   c) hazard
   d) all of above

39) Separation is a simple and _____machinery and equipment risk control.

a) Advance
b) Effectively
c) Other
d) None of above

40) Machine has only one operator, the use of simultaneous two-handed operation buttons can serve as a_____control.
a) Operation
b) Hazard
c) Risk
d) Accident

41) _____ safety is a system of organizational measures and technical means to prevent harmful and dangerous effects on workers from electric current.
a) Electrical
b) Physical
c) Chemical
d) Biological

42) Electricity can be either " _____ " or "dynamic.
a) Illustrate
b) Static
c) Workable
d) None of above

43) Humans are more conductive than the earth which means if there is no other easy path, will try to flow through our bodies.
a) Electricity
b) Power
c) Illness
d) Hazard

44) _____ contact with exposed energized conductors or circuit parts.
a) Indirect
b) Direct
c) Flow
d) None of above

45) Don't operate machinery when the_____is not in workshop.
a) Instructor
b) Operator
c) Worker
d) None of above

46) Legal requirement of owners to arrange periodic inspection, testing, and certificate for installation.
a) Mechanical
b) Electrical

c) Physical
d) None of above

47) _____ hazards are those associated with power-driven machines, whether automated or manually operated.
a) Mechanical
b) Chemical
c) Biological
d) None of above

48) A_____occurs when a body part comes in contact with a sharp edge.
a) Light
b) Work
c) Cut
d) All of above

49) _____ injuries occur when a part of the body is caught between hard surfaces that progressively move together.
a) Crushing
b) Moving
c) Lighting
d) Working

50) Machine safeguarding is to minimize the risk of _____ of machine-operator contact.
a) Risk
b) Accidents
c) Other
d) None of above

Unit 4

1) _____is a rapid oxidation of material releasing heat, light and various chemical products.
a) Fire
b) control
c) Work
d) Permeability

2) All material capable of an _____oxidation reaction has to be considered as flammable.
a) Endothermic
b) Exothermic
c) Reverse
d) None of above

3) _____ is usually available in sufficient quantities in our air to get a fire started and to sustain it.
a) Nitrogen
b) Carbon

c) Oxygen
d) Water

4) Fire can occur when flammable material, oxygen and sufficient ignition are available.
   a) Energy
   b) Wind
   c) Power
   d) None of above

5) _____ depends on an atmosphere of a mixture of flammable material with oxygen.
   a) Fire
   b) Explosion
   c) Boiling
   d) None of above

6) A fire hazard can harm workers and the public not only by causing burns but also by , fire gases, smoke.
   a) Light
   b) Power
   c) Heat
   d) All of above

7) Sudden change in pressure can also affect pressure sensitive organs like and lung.
   a) Nose
   b) Ear
   c) Eye
   d) None of above

8) Ignition can be caused by _____, conduction and radiation.
   a) Heat
   b) Light
   c) Convention
   d) All of above

9) Range between upper and lower explosion limit is called _____range.
   a) Flammable
   b) Radiation
   c) Heat
   d) None of above

10) Which type of fire extinguish do you use to fight an electrical fire if a carbon dioxide extinguisher is unavailable?
   a) Water
   b) Wet Chemical
   c) Foam
   d) Dry Powder

11) A water fire should be on fires started by which of the following materials?
    a) Materials such as gasoline that are highly flammable
    b) Materials made up of combustible metals
    c) Fires caused by electricity
    d) Materials such as paper, textiles, wood and other solid materials.
12) What type of fire extinguisher would you use on a fire that is categorised as a Class F Fire?
    a) Carbon Dioxide Fire Extinguishers
    b) Water Fire Extinguisher
    c) Wet Chemical Fire Extinguisher
    d) Dry Powder Fire Extinguisher
13) In the event of a fire, everyone is responsible for:
    a) Informing the supervisor of what is happening
    b) Pulling the fire alarm if they see a fire
    c) Making sure everyone gets to the fire assembly point safely
    d) None of the above
14) After using a carbon dioxide fire extinguisher, the nozzle gets extremely cold. This is a sign that:
    a) You should not use it
    b) It is safe to continue
    c) The materials inside are running low
    d) None of the above
15) Wood, plastic, paper and other solid materials are typically the culprits for _____.
    a) A Class F fire
    b) A Class B fire
    c) A Class A fire
    d) A Class C fire
16) Which of the following sentence is true about dry powder fire extinguishers?
    a) You should avoid using them in confined spaces
    b) They are the best choice for electrical fires
    c) You should only use them in confined spaces
    d) There is a black band above them
17) You should use a Dry Powder fire extinguisher in order to fight in an electrical fire, only in the event of _____.
    a) A carbon dioxide fire extinguisher is unavailable
    b) A foam fire extinguisher is unavailable
    c) You should never use a dry powder fire extinguisher on an electrical fire
    d) A water fire extinguisher is unavailable
18) Who has the authority to pull the fire alarm after discovering a fire on the worksite?
    a) Only the manager can activate the fire alarm

b) Anyone who has seen a fire can activate the fire alarm
c) Only the health and safety rep can activate the fire alarm
d) Only the owner can activate the fire alarm

19) What class of fire was a wet chemical fire extinguisher specifically designed to fight?
a) Class A fires
b) Class D Fires
c) Class F Fires
d) Class B Fires

20) When fighting and electrical fire, which of the following should not be used?
a) Water Fire Extinguisher
b) Foam Fire Extinguisher
c) Dry Powder Fire Extinguisher
d) Neither A nor B should be used.

21) Water fire extinguishers have a _____ located above them.
a) Red coloured band
b) Blue coloured band
c) Black coloured band
d) Green Coloured band

22) At what point do you sound the fire alarm?
a) After you try to extinguish it
b) As soon as you see it
c) After talking with your supervisor
d) After you grab all tools from the site

23) An example of two "Class B" fuels would be:
a) Cardboard, newspapers
b) Lamp, hot plate
c) Grease, paint thinner
d) Plastic, wood

24) Carbon Dioxide extinguishers are designed for which types of fuels?
a) Class B and C
b) Class A, B and C
c) Class A and C
d) Class A and B

25) The three elements of the fire triangle are:
a) Water, a heat source, and fuel
b) Oxygen, water, and fuel
c) Oxygen, fuel, and a heat source
d) Fuel, oxygen, and earth

26) What are the risks of fire?
a) Electricity, waste material

b) Paper, plastic
c) Dust, paint
d) None of above

27) _____ occurs when a large amount of energy is released into a small volume of area in a very short time.
a) Fog
b) Explosion
c) Fire
d) None of above

28) What is the mean of explosion?
a) a violent expansion or bursting with noise, as of gunpowder or a boiler
b) suddenly heating
c) at high temperature boiling
d) none of above

29) Why fire is so dangerous?
a) Fire is three triangles
b) It is heating
c) Fire is a chemical reaction that gives off light and heat
d) None of above

30) _____ types of fire can be extinguished by throwing sand or soil over it. 0
a) Small
b) Big
c) Medium
d) None of above

31) What are Class K fires?
a) Paint and varnish
b) Cooking oil and grease
c) Household item and waste
d) None of above

32) When heated, the vapour pressure of _____and combustible materials may increase resulting in higher vapour emissions. a) Flammable
b) High density
c) Low vapour
d) None of above

33) _____ may also deteriorate packaging and increase the risk of failure of the container and product loss.
a) Light
b) Weight
c) Heat
d) None of above

34) _____ explosive is compound or mixture which upon application of heat and shock.

a) Chemical
b) Mechanical
c) Biological
d) None of above

35) _____ is required to vaporize sufficient fuel molecules and to initiate the reaction.
a) Wood
b) Heat
c) Plastic
d) None of above

36) Combustion process, a continued supply of fuel and _____ is required to replace that consumed by the reaction.
a) Carbon
b) Hydrogen
c) Oxygen
d) Nitrogen

37) _____ combustion - fuel reacts with oxygen and both are completely consumed in the reaction to form new products.
a) Complete
b) Incomplete
c) Reversible
d) Irreversible

38) combustion process generates heat as it progresses so this type of chemical reaction is called _____.
a) endothermic
b) exothermic
c) irreversible
d) reversible

39) _____ gases are only produced once a coal seam is disturbed by mining and the released gas mixes with air.
a) Flammable
b) Explosive
c) Reduction
d) Exothermic

40) Diluting gas that cannot be captured at _____to high concentration rapidly to safe concentrations with ventilation air.
a) Low
b) Medium
c) Other
d) None of above

41) How often should fire alarms be tested?
a) Once a week
b) Once a year

c) Once every 12 hours
d) Once a month

42) Who is responsible for carrying out fire risk assessments?
a) HSE inspectors
b) Employees
c) Fire rescue service
d) Fire wardens

43) Why is it important to know the different classes of fire?
a) Because some cause greater damage than others
b) Because some are less dangerous to a person's health
c) Because everyone in a workplace needs to fight fire
d) Because certain fires can only be fought with certain fire extinguishers

44) How many classes of fires are there?
a) 2
b) 5
c) 7
d) 12

45) Class C fire involves what type of material?
a) Paper
b) Chemicals
c) Electricity
d) Metals

46) Which is the only class of fire that should be extinguished with water?
a) A
b) B
c) C
d) D

47) Carbon Dioxide based fire extinguishers remove what from the fire?
a) Heat
b) Oxygen
c) Fuel
d) Smoke

48) What is the percentage of fires in the workplace caused by human error?
a) 5%
b) 20%
c) 50%
d) 85%

49) Three elements typically are referred to as the " _____ ."
a) Fire triangle

b) fire extinguisher
c) fire protection
d) none of above

50) _____ fires involving ordinary combustibles, such as paper, trash, some plastics, wood and cloth.
a) Class B
b) Class A
c) Class C
d) Class K

Unit 5

1) _____ study identifies hazards and operability problems.
a) Hazard
b) Hazop
c) Hazan
d) None of above

2) Potentially dangerous condition, which is triggered by an event called the cause of the _____ . .
a) Hazard
b) Risk
c) Heard
d) Hazop

3) _____ is that associated with a severity and a probability of occurrence.
a) Accident
b) Risk
c) Hazan
d) None of above

4) The consequence of a _____mode on an operation, function, status of a system/process/activity/environment.
a) Fault
b) Tree
c) Failure
d) None of above

5) Fault tree analysis can yield both _____and _____ information about the system under study.
a) Qualitative, quantitative
b) Quantitative, reversible
c) Other
d) None of above

6) Why is risk assessment important?
a) they form an integral part of an occupational health and safety management plan

b) It is one type of analysis
c) It is risk authority process
d) None of above

7) _____ process is to evaluate hazards, then remove that hazard or minimize the level of its risk by adding control measures.
a) HAZOP
b) Risk Assessment
c) Hazan
d) None of above

8) The primary objective of an _____is to improve the design.
a) Failure mode effect analysis
b) Fault tree analysis
c) Hazop
d) None of above

9) HAZOP technique was initially developed to analyze _____ process systems.
a) Chemical
b) Physical
c) Biological
d) None of above

10) _____ is an initial high-level screening exercise that can be used to identify, describe during conceptual stage of a facility design.
a) Fault tree analysis
b) Preliminary hazard analysis
c) Hazop
d) None of above

11) Preliminary Hazard Analysis (PHA) was introduced in _____.
a) 1966
b) 1988
c) 1890
d) 1567

12) _____ collection is extremely important for hazard identification and preliminary hazard analysis.
a) Report
b) Data
c) Letter
d) None of above

13) Hazard Identification and Risk Assessment (HIRA) is carried for identification of _____ events that can lead to a hazard.
a) Desirable

b) Reversible
c) Undesirable
d) None of above

14) _____ is a qualitative technique for the early identification of potential hazards.
a) Hazard identification
b) Hazard analysis
c) Hazan
d) Hazop

15) PHA is a _____analysis method to evaluate the internal risk factors and the degree of risk in the system.
a) Quantify
b) Qualitative
c) other
d) None of above

16) _____ is a longitudinal analysis method.
a) Fault tree analysis
b) Hazop
c) Hazan
d) None of above

17) _____ is a kind of inductive method.
a) Fault tree analysis
b) Preliminary hazard
c) Event tree analysis
d) Hazop

18) What is the main purpose of hazard identification?
a) To minimise the effect of a consequence
b) For better risk management
c) To characterize adverse effect of toxins
d) To reduce probability of occurrence

19) The _____ process determines whether exposure to a chemical can increase the incidence of adverse health effect.
a) Hazard identification
b) Exposure assessment
c) Toxicity assessment
d) Risk characterization

20) Which of the following data is not required for hazard identification?
a) Land use
b) Contaminant levels
c) Affected population
d) Estimation of risk

21) Why does site history have to be considered for hazard identification?

a) To estimate the risk
b) To calculate carcinogenic exposure
c) To know the probable source and causes of contamination on site
d) For determination of remedial actions

22) What is the main objective of risk assessment?
a) To evaluate hazard and minimize the risks
b) Remediation of contaminated sites
c) Hazard management
d) To know source of pollutants

23) What is the first stage of risk assessment?
a) Exposure assessment
b) Hazard identification
c) Toxicity study
d) Risk characterization

24) An incident can be called hazardous only when?
a) Stressor has the potential to cause harm to humans and ecological systems
b) Poses threat to surrounding
c) Monitoring is failed
d) Outburst of chemicals

25) Hazard identification mainly focus on _____.
a) Chemical source and concentration
b) Chemical exposure
c) Chemical analysis
d) Chemical pathway

26) _____ is used for tracing all possible important factors and branches of events.
a) Failure mode
b) Fault tree analysis
c) Preliminary hazard analysis
d) None of above

27) Event tree analysis is used for checking the effects of functions, or any Systems.
a) Error
b) Value
c) Fun
d) None of above

28) _____ is used to represent the results of output factor only if all the input factors have been gone through.
a) OR gate
b) And gate
c) Nor gate
d) All of above

29) _____ Factor represent when the tree is developed into more branches with more options.
   a) Transfer
   b) Odd gate
   c) None gate
   d) Other

30) Hazard is any source of potential damage or _____health effects on something or someone.
   a) Reversible
   b) Non reversible
   c) Impact
   d) Adverse effect

31) What is example of hazard?
   a) Electricity and welding
   b) Paint and fear
   c) Cut and slip
   d) None of above

32) _____ is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard.
   a) Effect
   b) Harm
   c) Risk
   d) Accident

33) What is risk assessment?
   a) Analyze and evaluate the risk associated with that hazard
   b) Suddenly harm to another person
   c) Evaluation effective document
   d) None of above

34) What types of hazards are there?
   a) physical
   b) Organic
   c) Inorganic
   d) None of above

35) Every _____ is to prepare On site Emergency Plan and detailed disaster control measures for his factory.
   a) Staff
   b) Occupier
   c) Member
   d) None of above

36) _____ is one which has the potential to cause serious injury or loss of life or environment disruption.
   a) Emergency

b) Task
c) Occupier
d) None of above

37) _____ will be the responsibility of the works management to formulate it.
a) Off site plan
b) Event plant
c) On site plan
d) All of above

38) _____ will the responsibility of district emergency authority to integrate plans.
a) Off site plan
b) Event plant
c) On site plan
d) All of above

39) Communicator officer will _____information from the emergency affected area and send correct message to work main controller for declaration of emergency.
a) Call
b) Collect
c) Letter
d) None of above

40) _____ Will maintain a log book of incident.
a) Safety department
b) Mechanical
c) Communicator officer
d) None of above

41) _____ is an unplanned event which has a probability of causing personal injury or property damage. a) Incident
b) Hazard
c) Non hazard
d) None of above

42) _____ could be defined as any situation which presents a threat to safety of persons or / and property.
a) Plan
b) Emergency
c) Event
d) None of above

43) What is main objective of emergency plan?
a) To minimize damage to the property, people and the environment
b) To reduce effect of pollution
c) To organise event plan
d) None of above

44) Fundamental principles of emergency management are based on

a) mitigation, response
b) hear, skill
c) work, hazard
d) none of above

45) How do you recover from emergency situations?
a) Check yourself and others for injuries
b) Accidental plan
c) Hazop technique
d) None of above

46) Emergency action plan is a written document required by particular standards.
a) SPCB
b) GPCB
c) OSHA
d) None of above

47) _____ is those activities that continue beyond the emergency period to restore lifelines.
a) Reuse
b) Recycle
c) Rehabit
d) Recovery

48) _____ plan specifies procedures for handling sudden or unexpected situations.
a) Emergency
b) Off site
c) Onsite
d) None of above

49) What are the stages of disaster management?
a) Prevention, Mitigation, Preparedness
b) Measure, habit, prediction
c) Hazard, effect
d) None of above

50) What is a Level 1 emergency response?
a) Discuss about event
b) Meeting of safety rules
c) Emergency advice given over the telephone
d) All of above

Unit 6

1) You have been given a dust mask to protect against hazardous fumes. What should you do?
a) Do the job but work quickly

b) Do not start work until you have the correct Respiratory Protective Equipment
c) Start work but take a break now and again
d) Wear a second dust mask on top of the first one

2) Look at these statements about anti-vibration gloves. Which one is true?
a) They cut out all hand-ARM vibration
b) They only work against low frequency vibration
c) They give the most protection if they are worn over other gloves
d) They might not protect you against vibration

3) What should you do if you drop your safety helmet from an elevated area on to a hard surface?
a) Make sure there are no cracks then carry on wearing it
b) Work without a safety helmet until you can get a new one
c) Stop work and get a new safety helmet
d) Repair any cracks then carry on wearing it

4) _____ is needed when there are hazards present.
a) Personal protective equipment
b) Personal safety
c) Cloth
d) None of above

5) _____Protective equipment used to protect the individual wearer against the inhalation of hazardous substances in the workplace air. a) Non respiratory
b) Respiratory
c) Hazard mask
d) None of above

_____કાયયસ્થળની હવામાાં જોખમી પદાથોના ઇન્હલે ેશન સામે

વ્યક્ક્તગત પહરે નારને સરુ બક્ષત કરવા માટેના રક્ષણાત્મક ઉપકરણો. એ)

બિન-શ્વસન િંી) શ્વસન સી) હઝે ાડય માસ્ક ડી) ઉપરોક્ત કાંઈ નહીં

6) _____ is example of respirator.
a) Gas mask
b) Rubber mask
c) Inhalator
d) None of above

7) _____ agents can come into contact with the skin through direct contact with contaminated surfaces.
a) Physical
b) Chemical

c) Non-reactive
d) All of above

8) _____ are an essential item in providing skin protection.
   a) Gloves
   b) Mask
   c) Coat
   d) None of above

9) _____ is serve to protect one's face from potential impact hazards, chemical splashes or possible infectious fluid.
   a) Face mask
   b) Gloves
   c) Face shield
   d) Apron

10) _____ are effective in preventing eye injury from chemical splashes, impact, dusty environments and welding.
   a) Googles
   b) Ear muff
   c) Coat
   d) Face guard

11) Who is responsible for providing you with Personal Protective Equipment?
   a) Your employer
   b) Your supervisor
   c) Your co-worker
   d) Yourself

12) Personal Protective Equipment is required when –
   a) Employers suffer an injury
   b) The employees suffer an injury
   c) An employee asks for it
   d) Engineering, work practice, and administrative controls do not provide sufficient protection against hazards

13) Who is responsible for maintaining PPE?
   a) Your employer
   b) Yourself
   c) Your co-worker
   d) a and b both

14) What type of protection is needed when you are exposed to hazards from flying particles?
   a) Eye protection
   b) Face protection
   c) Head protection
   d) Both a and b

15) When working in areas where there is a potential for head injury from falling objects, you should.
   a) Look to the sky every 2 minutes for flying and falling objects
   b) Ask a colleague to give you a heads up when an object is about to fall
   c) Wear head protection
   d) Appoint yourself a personal superhero to whisk you away from falling objects

16) Eye protection is required for which of the following hazards?
   a) Flying particles
   b) Molten metal
   c) Liquid chemicals, acids or caustic liquids
   d) All of above

17) Welding shields primarily protect against_____.
   a) Dust
   b) Metal splatter
   c) Splashes
   d) Flying particles

18) Which of the classes of hard hats in the list below can save you from high voltage shocks as well as provide penetration and impact resistance?
   a) Class A
   b) Class B
   c) Class C
   d) Both a and b

19) Workers must _____ PPE before each use.
   a) Categorize
   b) Inspect
   c) Tag out
   d) Mark

20) Eye and face protection protect workers from hazards like _____.
   a) Crushing
   b) Falling
   c) Liquid chemicals
   d) Rolling

21) _____ is(are) useful in protecting workers from flash fires, flames, and electrical arcs.
   a) Aprons
   b) Cooling garments
   c) Flame Retardant Clothing
   d) Rubber gloves

22) Safety glasses should have approved _____.
   a) Nose pieces

b) Side shields
c) Straps
d) Visors

23) Wearing the right _____ in the right way, at the right time could save a workers life.
a) Emergency Shutdown Device (ESD)
b) Globally Harmonized System (GHS)
c) Job Safety Analysis (JSA)
d) Personal Protective Equipment (PPE)

24) Which of the following should be true about proper clothing choices for the jobsite:
a) Choose clothing that makes it easy to bend, stretch and move, in general.
b) Choose clothing that protects your body and limbs from injury.
c) Avoid loose and/or ripped clothing.
d) All of the above

25) Which of the following must be true of your jobsite footwear:
a) Work shoes or boots have light-coloured soles to keep from creating scuff marks on the wood.
b) Work shoes or boots have slip- and puncture-resistant soles to best protect your feet.
c) Work shoes or boots have Velcro closures instead of shoelaces.
d) Work shoes or boots should match your outfit

26) What is PPE?
a) anything someone can use or wear to mitigate the threats that workplace hazards pose to health and safety
b) hazard analysis protection
c) one type of plan event
d) none of above

27) _____ is protect the scalp, face and neck from overhead spills of acid.
a) Mask
b) Safety helmet
c) Gloves
d) Goggles

28) chemical safety data sheets must be consulted for advice on relevant _____.
a) PPE
b) Hazard
c) HAZOP
d) FACE MASK

29) _____ are comfortable and give chemical and liquid protection.
a) Mask
b) Gloves

c) Goggles
d) None of above

30) is best protection against bases, oils and many solvents and animal fats.
a) Rubber gloves
b) Nitrile gloves
c) Plastic gloves
d) All of above

31) _____ do not provide adequate physical protection from significant chemical splashes.
a) Safety glasses
b) Safety head
c) Gloves
d) None of above

32) PPE is equipment that will _____ the user against health or safety risks at work.
a) Hazard
b) Accident
c) Protect
d) None of above

33) Hair _____ should be of flame-retardant material for protection against sparks or hot metal.
a) Mask
b) Cap
c) Gloves
d) Boot

34) Noise level above _____is hazardous for exposure more than 8 hrs/day.
a) 90 db
b) 70 db
c) 60 db
d) 67 db

35) Noise level can be measured by a _____ .
a) Noise decibel
b) Noise average meter
c) Noise protection
d) All of above

36) _____ is made of plastic, rubber or polyurethane foam.
a) Earplug
b) Ear heard
c) Ear burd
d) None of above

37) _____ injuries can be caused by mechanical, chemical, thermal and radiation hazards such as dust, flying particles.
   a) Ear
   b) Eye
   c) Nose
   d) Hand

38) Natural _____gloves are stretchable and highly resistant to punctures.
   a) Rubber
   b) Plastic
   c) PVC
   d) Acrylic

39) Safety _____may be conductive, non-conductive or spark resistant.
   a) Gloves
   b) Shoes
   c) Mask
   d) None of above

40) _____ protectors are coats, waist, aprons, overalls, jackets and complete head to toe protective suits.
   a) Ear
   b) Body
   c) Nose
   d) None of above

41) _____ of different materials are used for protection against blows, splashes, radiant heat, flying particles, etc.
   a) Aprons
   b) Cloth
   c) Body
   d) Ear

42) wearer of the safety_____should not tie off below the waist level.
   a) Belt
   b) Ear
   c) Gloves
   d) None of above

43) _____ are designed to protect against injuries associated with regular eye hazards.
   a) Safety helmet
   b) Safety googles
   c) Safety shoes
   d) Safety mask

44) Companies are required to:
   a) Provide certain types of PPE at no cost to the employe
   b) Train employees on the use of PPE

c) Monitor and enforce the use of required PPE
d) All of the above.

45) Properly selected _____protection can protect employees from burns electrical shock and chemical absorption.
a) Hand
b) Ear
c) Eye
d) Leg

46) The primary objective of _____is to protect employees by creating a barrier against work place hazards.
a) Hazard
b) PPE
c) Protective
d) None of above

47) Safety glasses used in conjunction with a _____ provide the greatest level of protection when using grinding equipment. a) Face shield
b) Face mask
c) Face guard
d) None of above

48) Foam ear plugs provide greater protection than _____ .
a) Glass
b) Helmet
c) Ear muffs
d) None of above

49) Which of the following are considered PPE?
a) Safety glasses
b) Ear plugs
c) Gloves
d) All of the above

50) Whose responsibility is it to provide the required PPE?
   a) Yours
   b) The company
   c) OSHA
   d) b and C both

Unit 1:

32	b
33	a
34	c
35	a
36	a
37	c
38	a
39	b
40	a
41	b
42	a
43	b
44	a
45	b
46	a
47	b
48	a
49	b
50	b

UNIT 2:

1	a
2	a
3	a
4	c
5	a
6	a
7	c
8	b
9	a
10	b
11	a

1	a
2	c
3	b
4	a
5	b
6	a
7	d
8	b
9	a
10	c
11	a
12	b
13	a
14	a
15	b
16	b
17	a
18	a
19	a
20	b
21	a
22	b
23	a
24	c
25	b
26	a
27	a
28	b
29	a
30	b
31	a

45	a
46	c
47	a
48	c
49	a
50	b

Unit 4:

38	a
39	b
40	c
41	a
42	b
43	a
44	b
45	a
46	b
47	a
48	c
49	a
50	b

Unit 3:

12	a
13	b
14	a
15	b
16	a
17	a
18	a
19	b
20	b
21	a
22	b
23	c
24	a
25	b
26	b
27	c
28	a
29	d
30	a
31	a
32	b
33	a
34	c
35	a
36	b
37	a
38	b
39	c
40	a
41	c
42	a
43	b
44	c

1	a
2	c
3	a
4	b
5	c
6	a
7	b
8	b
9	b
10	b
11	a
12	b
13	d
14	c
15	d
16	c
17	A
18	d
19	d
20	b
21	c
22	a
23	d
24	a
25	b
26	d
27	a
28	b
29	d
30	B
31	c
32	b
33	b
34	a
35	C
36	a
37	b

Unit 5:

1	a
2	b
3	C
4	a
5	b
6	c
7	b
8	C
9	A
10	D
11	D
12	C
13	b
14	A
15	C
16	a
17	a
18	B
19	c
20	d
21	a
22	b
23	c
24	a
25	c
26	a
27	b
28	a
29	c
30	a

31	b
32	a
33	c
34	a
35	b
36	c
37	a
38	b
39	a
40	b
41	A
42	d
43	d
44	b
45	c
46	a
47	b
48	d
49	a
50	b

1	b
2	a
3	b
4	c
5	a
6	a
7	b
8	a
9	a
10	b
11	a
12	b
13	c
14	a
15	b
16	a
17	c
18	c
19	a
20	d
21	c
22	a
23	b

24	a
25	a
26	b
27	a
28	b
29	a
30	d
31	a
32	c
33	a
34	a
35	b
36	a
37	c
38	a
39	b
40	c
41	a
42	b
43	a
44	a
45	a
46	c
47	d
48	a
49	a
50	c

Unit 6:

1	b
2	d
3	c
4	a
5	b
6	a
7	b
8	a
9	c
10	a

11	a
12	d
13	d
14	d
15	c
16	d

17	b
18	d
19	b
20	c
21	c
22	b
23	d
24	d
25	b
26	a
27	b
28	a
29	b
30	b
31	a
32	c
33	b
34	a
35	b
36	a
37	b
38	a
39	a
40	b
41	a
42	a
43	b
44	d
45	a
46	b
47	a
48	c
49	d
50	b